

General

Title

Heart failure (HF): percentage of HF patients who are prescribed bisoprolol, carvedilol, or sustained-release metoprolol succinate for LVSD at hospital discharge.

Source(s)

The Joint Commission. Disease-specific care certification program. Advanced certification heart failure: performance measurement implementation guide. Oakbrook Terrace (IL): The Joint Commission; 2015 Mar. 76 p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of heart failure (HF) patients who are prescribed bisoprolol, carvedilol, or sustained-release metoprolol succinate for left ventricular systolic dysfunction (LVSD) at hospital discharge.

For purposes of this measure, LVSD is defined as chart documentation of a left ventricular ejection fraction (LVEF) less than 40% or a narrative description of left ventricular systolic (LVS) function consistent with moderate or severe systolic dysfunction.

Rationale

Beta-blocker therapy has been recommended for the treatment of patients with heart failure and reduced left ventricular ejection fraction (LVEF) since the 1970s (Lindenfeld et al., 2010). Several large-scale clinical trials have provided unequivocal evidence of important reductions in both morbidity and mortality.

The marked beneficial effects of beta blockade have been well demonstrated in large-scale clinical trials of symptomatic patients with New York Heart Association (NYHA) class II-IV heart failure and reduced LVEF using carvedilol, bisoprolol, and sustained-release metoprolol succinate (Hunt et al., 2009). These beta-blockers, in addition to angiotensin-converting enzyme (ACE) inhibitors and diuretics, are considered routine therapy for heart failure patients with reduced LVEF. Beta-blocker therapy is well tolerated by the majority of patients, even those with co-morbidities such as diabetes mellitus, chronic obstructive lung disease, and peripheral vascular disease.

Evidence for Rationale

American College of Cardiology Foundation, American Heart Association, Physician Consortium for Performance Improvement®. Heart failure performance measurement set. Chicago (IL): American Medical Association; 2011 Jan. 85 p. [51 references]

American Heart Association (AHA). Get With The Guidelines® outpatient fact sheet. Dallas (TX): American Heart Association (AHA); 2010.

Hunt SA, Abraham WT, Chin MH, Feldman AM, Francis GS, Ganiats TG, Jessup M, Konstam MA, Mancini DM, Michl K, Oates JA, Rahko PS, Silver MA, Stevenson LW, Yancy CW. 2009 focused update incorporated into the ACC/AHA 2005 guidelines for the diagnosis and management of heart failure in adults: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines [TRUNC]. *Circulation*. 2009 Apr 14;119(14):e391-479. [810 references] [PubMed](#)

Lindenfeld J, Albert NM, Boehmer JP, Collins SP, Ezekowitz JA, Givertz MM, Klapholz M, Moser DK, Rogers JG, Starling RC, Stevenson WG, Tang WH, Teerlink JR, Walsh MN. Executive summary: HFSA 2010 comprehensive heart failure practice guideline. *J Card Fail*. 2010;16:475-539.

The Joint Commission. Disease-specific care certification program. Advanced certification heart failure: performance measurement implementation guide. Oakbrook Terrace (IL): The Joint Commission; 2015 Mar. 76 p.

Primary Health Components

Heart failure; left ventricular systolic dysfunction (LVSD); left ventricular ejection fraction (LVEF); beta-blocker therapy; bisoprolol; carvedilol; sustained-release metoprolol succinate

Denominator Description

Heart failure patients with current or prior documentation of left ventricular ejection fraction (LVEF) less than 40% (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Patients who are prescribed bisoprolol, carvedilol, or sustained-release metoprolol succinate for left ventricular systolic dysfunction (LVSD) at hospital discharge

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

Unspecified

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Hospital Inpatient

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Specified

Target Population Age

Age greater than or equal to 18 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

Discharges January 1 through December 31

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Institutionalization

Patient/Individual (Consumer) Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Discharges with International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Principal Diagnosis Code for heart failure (HF) as defined in the appendices of the original measure documentation, and

Documentation of left ventricular systolic dysfunction (LVSD)* less than 40%

*For purposes of this measure, LVSD is defined as chart documentation of a left ventricular ejection fraction (LVEF) less than 40% or a narrative description of left ventricular systolic (LVS) function consistent with moderate or severe systolic dysfunction.

Exclusions

Patients who had a left ventricular assistive device (LVAD) or heart transplant procedure during hospital stay (ICD-9-CM procedure code for LVAD and heart transplant as defined in the appendices of the original measure documentation)

Patients less than 18 years of age

Patients who have a Length of Stay greater than 120 days

Patients with *Comfort Measures Only* (as defined in the Data Elements) documented

Patients enrolled in a *Clinical Trial* (as defined in the Data Elements)

Patients discharged to another hospital

Patients who left against medical advice

Patients who expired

Patients discharged to home for hospice care

Patients discharged to a healthcare facility for hospice care

Patients with a documented *Reason for No Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Succinate Prescribed for LVSD at Discharge* (as defined in the Data Elements)

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Patients who are prescribed bisoprolol, carvedilol, or sustained-release metoprolol succinate for left ventricular systolic dysfunction (LVSD) at hospital discharge

Exclusions

None

Numerator Search Strategy

Institutionalization

Data Source

Administrative clinical data

Paper medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

- Advanced Certification Heart Failure (ACHF) Initial Patient Population Algorithm Flowchart
- ACHF-01: Beta-blocker Therapy (i.e., Bisoprolol, Carvedilol, or Sustained-Release Metoprolol Succinate) Prescribed for LVSD at Discharge Flowchart

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

ACHF-01: Beta-blocker therapy (i.e., bisoprolol, carvedilol, or sustained-release metoprolol succinate prescribed for LVSD at discharge).

Measure Collection Name

Advanced Certification in Disease-specific Care Measures

Measure Set Name

Heart Failure Standardized Performance Measures

Submitter

The Joint Commission - Health Care Accreditation Organization

Developer

The Joint Commission - Health Care Accreditation Organization

Funding Source(s)

Unspecified

Composition of the Group that Developed the Measure

Unspecified

Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

Endorser

National Quality Forum - None

NQF Number

not defined yet

Date of Endorsement

2015 Jun 29

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2015 Mar

Measure Maintenance

Unspecified

Date of Next Anticipated Revision

2015 Jul

Measure Status

This is the current release of the measure.

The measure developer reaffirmed the currency of this measure in April 2016.

Measure Availability

Source available from [The Joint Commission Web site](#) .

For more information, contact The Joint Commission at One Renaissance Blvd., Oakbrook Terrace, IL 60181; Phone: 630-792-5800; Fax: 630-792-5005; Web site: www.jointcommission.org

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NQMC Status

This NQMC summary was completed by ECRI Institute on May 21, 2015. The information was verified by the measure developer on June 15, 2015.

The information was reaffirmed by the measure developer on April 6, 2016.

Copyright Statement

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Production

Source(s)

The Joint Commission. Disease-specific care certification program. Advanced certification heart failure: performance measurement implementation guide. Oakbrook Terrace (IL): The Joint Commission; 2015 Mar. 76 p.

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